

R E M A R K S

Firstly, it is noted that the pending claims are free of the prior art, as noted at page 5 of the Office Action.

This reply is timely filed, with a three month extension of time fees, as the 15th of February was a Saturday, the 17th of February was a federal holiday(Presidents' Day) and the US PTO was closed, along with other federal government agencies, on the 18th of February due to the snow storm.

Rejection of the Claims Under 35 U.S.C. §101

Claims 23, 24, 26 and 32 stand rejected for allegedly lacking either a specific and substantial asserted utility or a well established utility under §101. Applicants respectfully traverse for the reasons given below.

The specification clearly discloses the specific, substantial and credible utility of the claimed invention. SEQ ID NO:375, of claim 23, is encoded by SEQ ID NO:121 (specification at page 155). Review of the expression data collected in a Northern blot analysis for SEQ ID NO:121 clearly indicates that the gene is down-regulated in cancerous bladder tissue since the ratio of tumor to normal gene expression is 0.1873 (specification at page 111). This correlation is not observed in the other tissue types examined in the Northern analysis. Thus, this gene is a specific marker for human bladder cancer. This is clearly a substantial use. The experimental data makes it credible.

Moreover, use of the polypeptide of the present invention, which has such a demonstrable correlation with bladder cancer and an associated activity as a PKC-potentiated inhibitory protein of PP1 (specification at page 143), would also have a specific, substantial and credible use as the polypeptides would find at least ready use in the diagnosis of bladder cancer, e.g., via routinely produced antibodies. It would also have such a use in the treatment of bladder cancer. One of ordinary skill in the art would readily recognize that the data comparing the tumor versus normal gene expression in human bladder tissues provides adequate disclosure for how the polypeptide can find use as a screening tool in the diagnosis of bladder cancer.

Therefore, in view of the specific, substantial and credible utilities for the polypeptide having SEQ ID NO:375, the rejection under 35 U.S.C. §101 is without a proper legal basis and should be withdrawn.

Rejection of the Claims Under 35 U.S.C. §112, first paragraph

Claims 23, 24, 26 and 32 stand rejected under 35 U.S.C. §112, first paragraph for allegedly lacking written description. Applicants respectfully traverse.

One of ordinary skill in the art, using conventional techniques in modern molecular biology, would be able to construct polypeptides having sequences which are 80% or 90% homologous to the polypeptide of SEQ ID NO:375 and possess the associated functional activity as a PKC-potentiated inhibitory protein of PP1, as described for the encoding gene (SEQ ID NO:121). See e.g., the specification at page 143. One of ordinary skill in the art, using conventional techniques/assays, would be able to ascertain that the polypeptides having 80 or 90% homology have the associated functional activity. The rejection of the claims under §112, first paragraph is improper and should be withdrawn.

Rejection of the Claims Under 35 U.S.C. §112, second paragraph

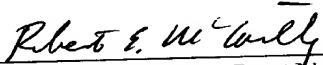
Claims 23, 24, 26 and 32 stand rejected as allegedly being indefinite under §112, second paragraph. Claims 23, 24, and 26 have been rewritten to remove the term “partial”. The rejection of the claims is now moot and should be withdrawn.

In view of the above remarks, favorable consideration is courteously requested. However, if there is any remaining issue(s) which can be expeditiously resolved by a telephone conference, the Examiner is courteously requested to telephone the undersigned at the number indicated below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Version With Markings To Show Changes Made".

Respectfully submitted,


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IN THE CLAIMS:

Please **amend** the claims as follows:

23. (Amended) ~~An isolated polypeptide comprising Polypeptide partial sequences according to Seq. ID Nos. 128-390 and 404-431~~ SEQ ID NO:375.

24. (Amended) ~~Polypeptide partial sequences~~ An isolated polypeptide having at least 80% homology to SEQ ID NO: 375 according to claim 23 with at least 80% homology to these sequences, and wherein said polypeptide is a PKC-potentiated inhibitory protein of PP1.

26. (Amended) ~~Polypeptide partial sequences~~ An isolated polypeptide having at least 90% homology to SEQ ID NO: 375 according to claim 23 with at least 80% homology to these sequences and wherein said polypeptide is a PKC-potentiated inhibitory protein of PP1.